

THE RELATIONSHIP BETWEEN LIVESTOCK GRAZING AND FIRE

**A SPECIAL REPORT PREPARED FOR THE ELKO COUNTY BOARD
OF COMMISSIONERS, WELLS, NEVADA AUGUST 8, 2000**

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ANTHONY L. LESPERANCE, COMMISSIONER

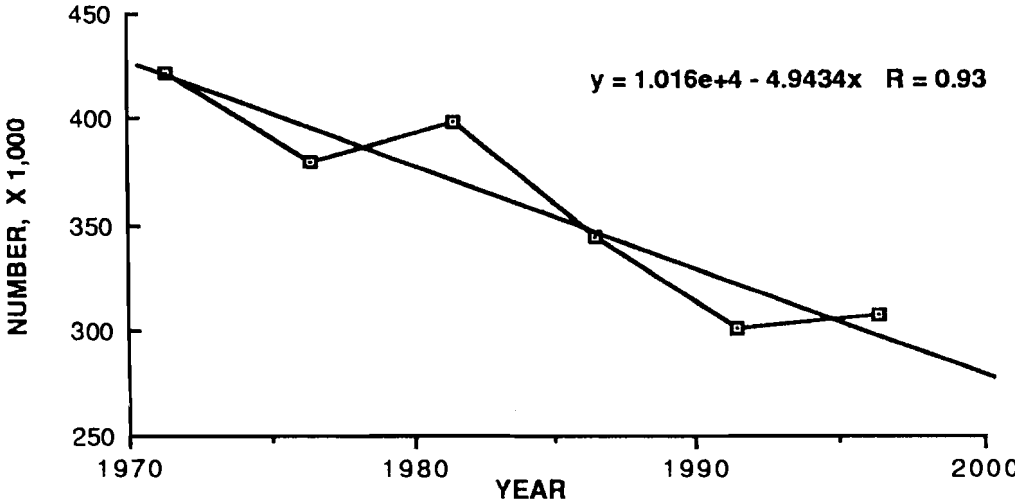
COW COUNTY CATTLE NUMBERS 1971-1998

YEARS	NUMBER
71-75	417.0
76-80	375.0
81-85	393.4
86-90	339.4
91-95	295.8
96-98	302.3

NOTES:

1. ONLY CATTLE NUMBERS AS OF JANUARY 1, AS REPORTED BY THE STATE STATISTICIAN, ARE USED
2. REPORTED VALUES ARE THE AVERAGE FOR THE 5 YEAR PERIOD
3. ABOVE CATTLE NUMBER MUST BE MULTIPLIED BY 1,000 FOR ACTUAL NUMBER
4. COW COUNTIES INCLUDE; ELKO, EUREKA, HUMBOLDT, LANDER, NYE AND WHITE PINE

COW COUNTY CATTLE NUMBERS AS OF JANUARY 1



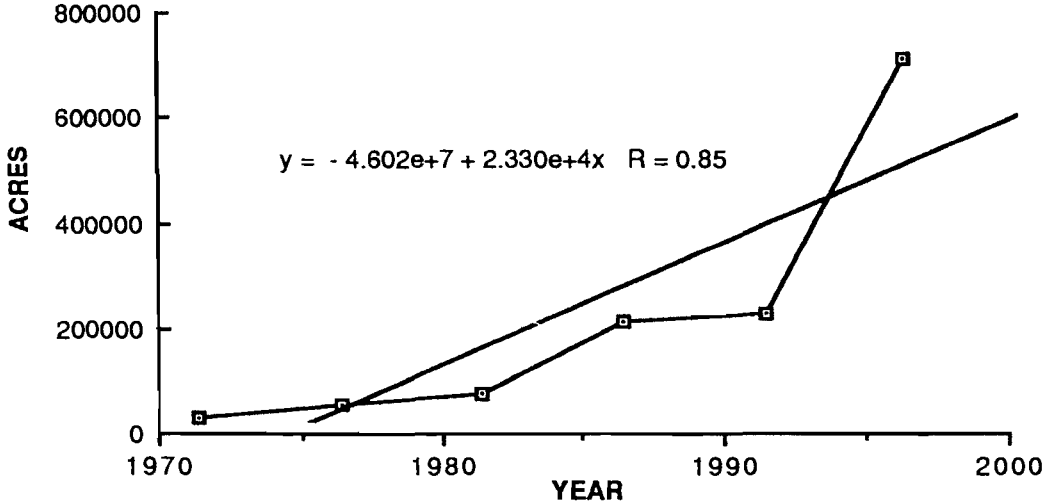
ACRES DESTROYED BY RANGE FIRE, 1971-1999

YEARS	ACRES
71-75	10,641
76-80	36,561
81-85	58,467
86-90	193,766
91-95	210,044
96-99	695,066

NOTES:

1. FIRE ACREAGE BASED ON NUMBERS PROVIDED BY THE NDF AND BLM
2. REPORTED VALUES ARE THE AVERAGE FOR THE 5 YEAR PERIOD

ACRES OF RANGE BURNED BY YEAR



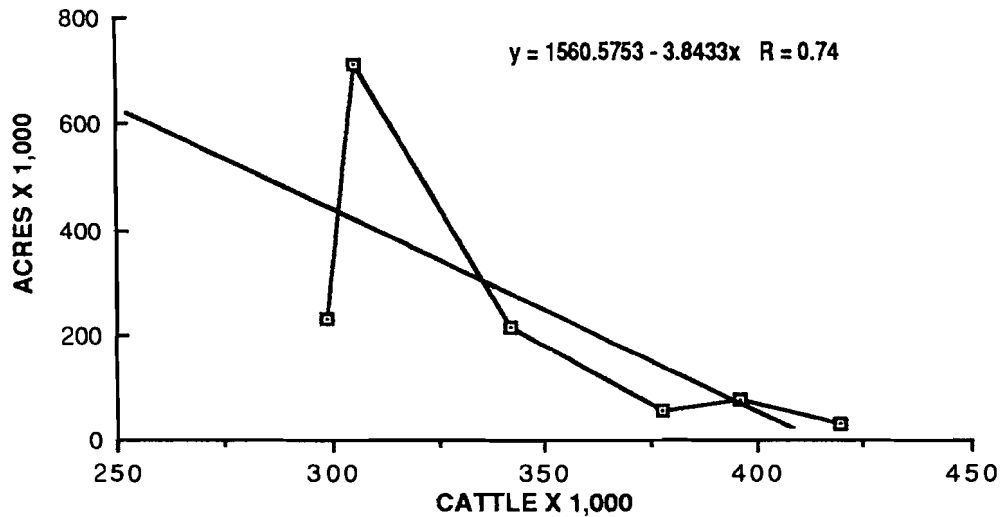
RELATIONSHIP BETWEEN CATTLE NUMBERS AND FIRE

YEAR	CATTLE NUMBER	ACRES BURNED
71-75	417,000	10,641
76-80	375,000	36,561
81-85	393,400	58,467
86-90	339,400	193,766
91-95	295,800	210,044
96-99	302,300	695,066

NOTES

1. ALL REPORTED NUMBERS ARE THE AVERAGE OF THE FIVE YEAR INCREMENT

RELATIONSHIP BETWEEN CATTLE AND FIRE



NOTES:

1. WHEN X = 400,000 CATTLE, Y = 23.3, OR WHEN 400,000 CATTLE EXIST IN THE COW COUNTIES, 23,300 ACRES WOULD BURN

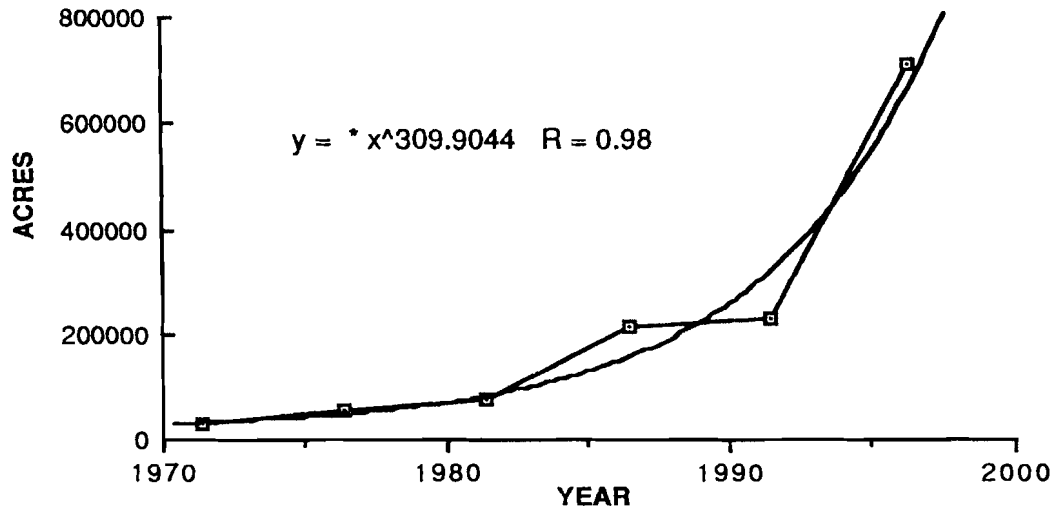
2. WHEN X = 200,000 CATTLE, Y = 791.9, OR WHEN 200,000 CATTLE EXIST IN THE COW COUNTIES, 791,900 ACRES WOULD BURN

3. THUS, 791,900 ACRES - 23,300 ACRES = 768,600 ACRES/200,000 CATTLE = 3.84 ACRES PER HEAD CATTLE

4. ONE MAY ASSUME THAT EVERY COW WILL GRAZE RANGELAND ON THE AVERAGE 8 MONTHS PER YEAR, THUS 3.84 ACRES/8 MONTHS = 0.5 ACRES PER AUM

WHAT THIS MEANS IS THAT THIS RELATIONSHIP INDICATES THAT FOR EVERY AUM NOT BEING UTILIZED AT PRESENT AMOUNTS TO ANOTHER ONE HALF ACRE GOING UP IN FLAMES!

ACRES OF RANGE BURNED BY YEAR



NOTES:

1. GRAPH OF ACRES BURNED BY YEAR USING A LOGARITHMIC EXPRESSION OF THE CURVE, RATHER THAN A STRAIGHT LINE
2. IF THIS TREND CONTINUES, WE CAN EXPECT SOMEWHERE AROUND TWO MILLION ACRES TO BURN ON THE AVERAGE FOR THE YEARS 2001-2005, OR A TOTAL OF AROUND TEN MILLION ACRES, ROUGHLY THE SIZE OF ELKO COUNTY.